C L A I M S

1. In a nonaqueous electrolyte secondary battery using a material capable of storing and releasing lithium as the negative electrode material and a lithium transition metal complex oxide containing Ni and Mn as the transition metal and having a layered structure as the positive electrode material,

said secondary battery being characterized in that said lithium transition metal complex oxide has a BET specific surface area of less than 3 m^2/g and gives a pH value of not greater than 11.0 when it is immersed in purified water in the amount of 5 g per 50 ml of the purified water.

2. The nonaqueous electrolyte secondary battery as recited in claim 1, characterized as using an outer casing susceptible to deformation in case of internal pressure buildup within the battery.

3. The nonaqueous electrolyte secondary battery as recited in claim 2, characterized in that said internal pressure buildup is caused by a gas generated within the battery during storage.

4. The nonaqueous electrolyte secondary battery as recited in claim 2 or 3, characterized in that said outer casing is composed at least partly of an aluminum alloy or aluminum laminate film having a thickness of up to 0.5 mm.

5. The nonaqueous electrolyte secondary battery as recited in any one of claims 1 - 4, characterized in that said lithium

transition metal complex oxide is represented by the formula $Li_aMn_xNi_yCo_zO_2$ (wherein a, x, y and z are numbers satisfying $0 \leq a \leq 1.2$, $x + y + z = 1$, $x > 0$, $y > 0$ and $z \geq 0$).

6. The nonaqueous electrolyte secondary battery as recited in any one of claims 1 - 5, characterized in that said lithium transition metal complex oxide contains substantially the same amount of nickel and manganese.

7. The nonaqueous electrolyte secondary battery as recited in any one of claims 1 - 6, characterized in that said lithium transition metal complex oxide has a BET specific surface area of not greater than 2 m^2/g.